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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/929,202      | 08/14/2001  | Charu C. Aggarwal    | YOR920010429US1     | 9509             |

7590 01/27/2005  
Ryan, Mason & Lewis, LLP  
90 Forest Avenue  
Locust Valley, NY 11560

EXAMINER

LEWIS, CHERYL RENE A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2167

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n N .

09/929,202

Applicant(s)

AGGARWAL, CHARU C.

Examin r

Cheryl Lewis

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,9-11,13 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 2,6,8,12,14 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/19/05</u>   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 1-18 are presented for examination.

### **INFORMATION DISCLOSURE STATEMENT**

2. The information disclosure statements filed on February 11, 2002, complies with the provisions of MPEP § 609. They have been placed in the application file, and the information referred to therein has been considered as to the merits.

### ***Drawings***

3. The drawings filed on January 4, 2002 have not been approved by the Examiner. Refer to the attached PTO-948.

### ***Allowable Subject Matter***

4. Claims 2, 6, 8, 12, 14, and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3-5, 7, 9-11, 13, and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Taniguchi et al. (Pat. No. 5,764,975 filed March 27, 1996, hereinafter Taniguchi).

7. Regarding Claims 1, 7, and 13, Taniguchi teaches a data mining method and apparatus using rate of common records as a measure of similarity.

The method and associated system for using rate of common records as a measure of similarity as taught or suggested by Taniguchi includes:

obtaining a training set of objects (col. 5, lines 9-20 and 66-67, col. 6, lines 1-10, '...the minimum similarity of the displayed rules is 0.8 and indicates that M rules having a similarity with the designated rule of more than 0.8 are detected and the rule 5 has a highest similarity...'); presenting a user with one or more subsets of objects based on the training set of objects (col. 5, lines 18-24 and 34-62, '...customer trend will be considered with respect to purchase of a certain financial goods. In the data shown in FIG. 3, purchase results of a certain financial goods are stored together with information including customer's number, age, sex, area code, deposit balance, and loan balance.', col. 6, lines 53-67), each subset comprising at least two objects of the data set (col. 5, lines 18-24 and 34-62, 'A rule 2 indicates that 31% (fitness) of customers whose age is more than 40 years and less than 45 years, whose sex is male, and whose area code is 3 purchase financial goods.', col. 6, lines 53-67); receiving user feedback regarding similarity between the one or more subsets of objects (col. 8, lines 34-67, col. 9, lines 16-61); defining one or more set of feature variables based on features in the one or

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more subsets of objects (col. 5, lines 18-24 and 34-62, col. 6, lines 53-67, col. 9, lines 16-61); defining one or more class variables in accordance with the user feedback (col. 5, lines 18-24 and 34-62, col. 6, lines 53-67); and constructing a similarity function which relates the one or more sets of feature variables to the one or more class variables (col. 5, lines 18-24 and 34-62, col. 6, lines 53-67); at least one processor (col. 5, lines 24-33); and memory (col. 5, lines 24-33).

8. Regarding Claims 3, 9, and 15, Taniguchi teaches one or more class variables are based on one or more similarity values returned by the user (col. 5, lines 18-24 and 34-62, col. 6, lines 53-67, col. 8, lines 23-58).

9. Regarding Claims 4, 10, and 16, Taniguchi teaches each of the sets of feature variables is defined as a parametric function of the features in the corresponding subset of objects (col. 5, lines 18-24 and 34-62, col. 6, lines 53-67, col. 8, lines 23-58).

10. Regarding Claims 5, 11, and 17, Taniguchi teaches one or more parameters of the function are determined in accordance with the user feedback (col. 5, lines 18-24 and 34-62, col. 6, lines 53-67, col. 8, lines 23-58).

### **CONCLUSION**

11. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

- A. Fayyad et al. (U.S. Pat. 6,633,882);
- B. Chaudhuri et al. (U.S. Pat. 6,212,526); and
- C. Billheimer et al. (U.S. Pat. 6,611,825).

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**NAME OF CONTACT**

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Lewis whose telephone number is (571) 272-4113. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 or (703) 305-9731.

(571) 273-4113 (Use this FAX #, only after approval by Examiner, for "INFORMAL" or "DRAFT" communication. Examiners may request that a formal paper/amendment be faxed directly to them on occasions.).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/ Technology Center (571) 272-2100.

A handwritten signature in black ink, appearing to read 'Cheryl Lewis', with a stylized, cursive script.

Cheryl Lewis  
Patent Examiner  
January 19, 2005